

# EXHIBIT 7

**DECLARATION OF DAVID A. TIRRELL**

I, David A. Tirrell, declare as follows:

1. I am the provost at the California Institute of Technology (Caltech) in Pasadena, CA. I have held that position since October 1, 2017. I have held an appointment as Professor of Chemistry and Chemical Engineering at Caltech since July 1, 1998. I previously held professorial appointments at Carnegie Mellon University and at the University of Massachusetts at Amherst.

2. As provost, I have personal knowledge of the contents of this declaration, or have knowledge of the matters based on my review of information and records gathered by Caltech personnel, and could testify thereto.

3. Caltech receives substantial annual funding from the National Institutes of Health (“NIH”). In fiscal year 2024, we expended \$78,989,843 in conducting research supported by NIH. Of this total, \$54,869,817 were expended as direct costs, \$24,120,026 as indirect costs. We have 175 active NIH awards and subawards.

4. The funding Caltech receives from NIH supports critically important medical research, which millions of Americans benefit from and depend on. For example:

- a. Caltech research in immunology and neurobiology is advancing the development of reliable biomarkers for neurodevelopmental disorders including autism spectrum disorder and schizophrenia.
- b. Caltech research in structural biology is providing strategies for engineering of therapeutic antibodies for treatment of viral infection, including by the virus that causes Covid-19 and related diseases.
- c. Caltech research in medical engineering has yielded photoacoustic microscopy methods that allow pathologists to identify cancerous features and enable

accurate definition of tumor margins to guide surgical resection of bone tumors without exposure to radiation.

5. Indirect costs are essential for supporting this research. The NIH's proposal to cut indirect cost rates to 15% would jeopardize all of the research projects described in paragraph 4.

6. Indirect costs include those incurred in the construction and maintenance of state-of-the-art facilities for advanced research, as well as the procurement and maintenance of the equipment necessary to conduct such research. Without this equipment, we cannot conduct the research.

7. For example, with respect to the areas of research described in Paragraph 4:

- a. The NIH-supported research described in Paragraph 4a is conducted in the Chen Institute for Neuroscience on the Caltech campus. Construction of the Chen Neuroscience Research Building was completed in 2020 at a cost of more than \$200,000,000. Indirect cost recovery is an essential element of the financing of the building.
- b. The NIH-supported research described in Paragraph 4b is carried out in the Caltech Center for Cryo-Electron Microscopy, a state-of-the-art facility that was recently renovated to enable the installation and operation of high-quality instrumentation for biomedical imaging. Indirect cost recovery is critically important to the renovation, operation and maintenance of this facility.
- c. The NIH-supported research described in Paragraph 4c is performed in the W. M. Keck Engineering Laboratories, which were opened in 1960. Extensive renovation of the Keck building was required to create the Caltech Optical

Imaging Laboratory in 2017. Indirect cost recovery was essential to the construction and outfitting of the laboratory.

8. In addition, indirect costs fund the administration of awards, including staff who ensure compliance with a large number of regulatory mandates from agencies such as NIH.<sup>1</sup> These mandates serve many important functions, including protecting human and animal subjects involved in research; ensuring research integrity; properly managing and disposing of chemical and biological agents used in research; preventing financial conflicts of interest; managing funds; preventing intellectual property, technologies, or national security expertise from being inappropriately accessed by foreign adversaries; and providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data.

9. Recovery of Caltech's indirect costs is based on predetermined rates that have been contractually negotiated with the federal government.

10. In fiscal year 2024, the predetermined indirect cost rate is 70% of modified total direct costs. The amount of indirect cost recovered during the year reflects rates negotiated over several years, owing to the multi-year character of NIH awards.

11. The impact of a reduction in the indirect cost rate would cause substantial harm to the Caltech research enterprise. As noted in Paragraph 3, of the \$78,989,843 in NIH funds expended in fiscal year 2024, \$54,869,817 were expended as direct costs, \$24,120,026 as indirect costs. We expect our expenditures in fiscal year 2025 to be similar. If—contrary to what Caltech has negotiated with the federal government—the indirect cost rate is reduced to 15%, Caltech's anticipated annual indirect cost recovery would be reduced by approximately \$16,000,000, to roughly \$8,000,000.

---

<sup>1</sup> <https://grants.nih.gov/grants/policy/nihgps/nihgps.pdf>

12. This reduction will have deeply damaging effects on Caltech's ability to conduct research from day one. For example:

- a. Caltech is currently making decisions regarding admission of graduate students who conduct much of our NIH-supported research. The number of graduate students – who are the future of biomedical research – who can be admitted will have to be reduced substantially. The impact on the future of research will be immediate and unrecoverable.
- b. Offers to new postdoctoral scholars also will be reduced, with similar impact on the quality of the research environment and on the future of biomedical research.
- c. Support for our shared biomedical research facilities will have to be reduced immediately. The viability of these facilities will be compromised.

13. Caltech is in the process of submitting 11 applications for NIH research support. The uncertainty regarding NIH indirect cost policy makes it impossible to complete submission of these applications, which are intended to support research related to nicotine addiction, congenital birth defects, aging, neuromodulation, Parkinson's disease, and biomedical measurement technologies.

14. Caltech has for decades relied on the payment of indirect costs. Until now, we have been able to rely on the well-established process for negotiating indirect cost rates with the government to inform our budgeting and planning. Operating budgets rely on estimates of both direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory compliance, and grant management support), and facility and equipment purchases. Furthermore,

Caltech has long-term obligations—for example, the financing of already-constructed research facilities such as the Chen Neuroscience Research Building—and it relies on budgeted indirect cost recovery to fulfill these commitments.

15. In addition to the immediate impacts described above, there are longer term impacts that are both cumulative and cascading. Perhaps most harmful is the contraction in Caltech's ability to train the biomedical researchers of the future, which will compound from year to year if the proposed reduction in indirect cost recovery is implemented.

16. A slowing of research at Caltech and other American universities will allow competitor nations that are maintaining their investments to surpass the United States on this front, threatening both our Nation's national security and its economic dominance.

17. Nor can Caltech cover the funding gap itself. While Caltech maintains an endowment, it is neither feasible nor sustainable for Caltech to use endowment funds or other revenue sources to offset shortfalls in indirect cost recovery, for several reasons:

- a. The majority of Caltech's endowment is restricted to specific donor-designated purposes, such as scholarships, faculty chairs, and academic programs. Caltech is not legally permitted to use those funds to cover research infrastructure costs.
- b. Even the portion of the endowment that is unrestricted is subject to a carefully managed annual payout, typically around 5%, to ensure long-term financial stability for the institution.
- c. As a non-profit institution, Caltech applies all of its revenue to mission-critical activities, leaving little margin to absorb unexpected funding gaps. Unlike for-profit organizations, Caltech does not generate significant surpluses that could

be redirected without impacting core academic priorities such as educational programs and financial aid support for students.

18. Moreover, absorbing the cost of a lower indirect cost rate, even if it were possible, would create long-term budget pressures on Caltech—which would in turn force reductions in key investments supporting Caltech’s faculty, students, staff, research, and teaching infrastructure, as well as other critical activities needed to maintain Caltech’s academic excellence and its ability to perform research in the national interest.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 9, 2025, at Pasadena, CA.



---

David A. Tirrell